

Neurology Specialists

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**NEUROPSYCHOLOGICAL EVALUATION--CONFIDENTIAL**

NAME:	MARYLAND WILLIAMS
AGE:	77
DATE OF BIRTH:	-
DATES OF SERVICE:	Intake Interview: 8/27/14; Testing Evaluation: 9/15/14; F/F Review of Results with Patient: 11/10/14
REFERRAL SOURCE:	Lina Wang, MD, Neurology Specialists

**NEUROPSYCHOLOGICAL TEST SCORES:** When possible, test results are reported in terms of percentiles relative to a comparable population. For example, a percentile rank of 60 indicates that the patient's estimated performance was better than 60% of the general population of the patient's age and education level based on comparison with a normative sample. In general, percentile rank labeling ranges from impaired (<1-10%), low average (11-24%), average (25-75%), above average (76-90%), and superior (>90%) ranges. "WNL" refers to within normal limits.

**TEST CONCLUSIONS:** Based on a visuoperceptual task designed to assess baseline IQ, Mr. Williams' **baseline estimates are in the impaired range (3%)**. This finding is consistent with level of education and report of the patient being illiterate. His performance on brief mental status testing (**MOCA = 10/30**) was well outside normal range with errors noted in all areas. His performance on a more sensitive screening measure for dementia (**DRS = 65/144**) was again dramatically below expectation (<129) and in the impaired range (<1%) consistent with dementia status. Mr. Williams performed in the impaired range (<1%) across all subtests, including the attention, initiation, construction, conceptualization, and memory exams. He was also noted to be generally disoriented to time (e.g. year = "2003") but was somewhat oriented to place. **More specific neuropsychological testing reveals generalized and global aspects of cognitive impairment.**

**Mr. Williams' ability to learn and recall new information is impaired.** He exhibits no clear benefit from repetition of information during the learning phase and his free recall of both verbal and visual material is impaired without benefit from recognition cueing. **All other aspects of cognitive status are in the impaired range.** Verbal fluency and naming are impaired for language functioning. Simple visuo-motor processing speed is impaired. Executive functioning features are impaired, including working memory and untimed problem-solving skills. Visuoperceptual abilities are impaired as Mr. Williams exhibited difficulty copying a complex geometric figure, although he did recognize the overall gestalt. Finally, his performance on a measurement assessing functional living skills was in the impaired range (<1%) with impairments noted in orientation to time,

ability to calculate money, perform mental arithmetic, communication skills, and memory functioning. Patient reported completion of a depression inventory which was read out loud to the patient was within a range implicating **borderline levels of depressed affect**.

**DIAGNOSTIC IMPRESSIONS:** Neuropsychological test findings reveal global cognitive impairments across all domains in an individual with impaired-range baseline estimates, consistent with level of education and report of illiteracy. Although there may be a longstanding history of developmental intellectual disability, it is clear that current status represents a decline from baseline in an individual who historically was employed and independent in ADLs; therefore, while it is difficult to fully inform etiology, **findings clearly meet criteria for dementia status, at least moderate in severity**, given the global aspects of cognitive impairment and consistent with report of dependence in all ADLs.

Findings may represent a neurodegenerative course such as Alzheimer's disease in tandem with possible vascular contributions (i.e. mixed etiology) captured in imaging in a historically at-risk individual. An overlap of **borderline depressive features** may be mildly contributory, but this level of depression is unlikely to fully account for test findings. Hearing loss is also a possible contributor in addition to metabolic features in the setting of renal disorder. **Findings support the need for oversight of ADLs and guardianship.**

**RECOMMENDATIONS:**

1. Mr. Williams will be provided the results of his evaluation on November 10, 2014. After review of test findings, behavioral strategies for overcoming weaknesses will be provided, including a copy of the conclusions and recommendations sections of this report.
2. Borderline levels of depressed affect are reported by the patient, but it is not clear as to the extent of his understanding of this assessment tool. Overall, his daughter reports no observation of significant changes in psychological status in tandem with again only borderline findings in testing. As such, results do not clearly support the need for psychological treatment at this time. Should mood worsen, the initiation of a low-dose antidepressant could be of benefit, possibly with activating qualities, as the patient is described as frequently drowsy and difficult to engage.
3. Results clearly support the need for oversight of all aspects of ADLs, which is already in place by the patient's daughter. Findings also support the need for guardianship given the presence of relatively dramatic dementia status. This will be reviewed with the patient and his daughter at the feedback session.
4. Given the level of dementia severity at this time, it is unclear if initiation of a memory aid medication would be indicated at this time. Mr. Williams is deferred back to treating provider for discussion.
5. Stroke prevention is encouraged, including medication compliance, healthy diet, and weight management. Limited exercise is clearly difficult given the presence of ambulation and cognitive difficulties.
6. Risk for caregiver stress/burden is present given the extent of need for both Mr. Williams and his wife and there is currently no additional aid in place. Mr.

Williams' daughter will be encouraged to consult with the local chapter of the Alzheimer's Association (1-800-272-3900) as needed for input regarding local caregiver resources and information regarding increased care services.

7. Current test findings can serve as a baseline should there be a need for repeat study.

cc: Drs. Wang and Thomas Pecsok

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11/10/14  
Date